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- (i) The designation appearing on the lamp packaging; and
- (ii) Marketing materials that identify the lamp as being vibration service only.

Voltage range means a band of operating voltages as marked on an incandescent lamp, indicating that the lamp is designed to operate at any voltage within the band.

Wall electric heater means an electric heater (excluding baseboard electric heaters) which is intended to be recessed in or surface mounted on walls, which transfers heat by radiation and/or convection (either natural or forced) and which includes forced convectors, natural convectors, radiant heaters, high wall or valance heaters.

Water closet means a plumbing fixture that has a water-containing receptor which receives liquid and solid body waste, and upon actuation, conveys the waste through an exposed integral trap seal into a gravity drainage system, except such term does not include fixtures designed for installation in prisons.

Water heater means a product which utilizes oil, gas, or electricity to heat potable water for use outside the heater upon demand, including—

- (a) Storage type units which heat and store water at a thermostatically controlled temperature, including gas storage water heaters with an input of 75,000 Btu per hour or less, oil storage water heaters with an input of 105,000 Btu per hour or less, and electric storage water heaters with an input of 12 kilowatts or less;
- (b) Instantaneous type units which heat water but contain no more than one gallon of water per 4,000 Btu per hour of input, including gas instantaneous water heaters with an input of 200,000 Btu per hour or less, oil instantaneous water heaters with an input of 210,000 Btu per hour or less, and electric instantaneous water heaters with an input of 12 kilowatts or less; and
- (c) Heat pump type units, with a maximum current rating of 24 amperes at a voltage no greater than 250 volts, which are products designed to transfer thermal energy from one temperature level to a higher temperature level for the purpose of heating water, including all ancillary equipment such as fans,

storage tanks, pumps, or controls necessary for the device to perform its function

Water use means the quantity of water flowing through a showerhead, faucet, water closet, or urinal at point of use, determined in accordance with test procedures under Appendices S and T of subpart B of this part.

Weatherized warm air furnace or boiler means a furnace or boiler designed for installation outdoors, approved for resistance to wind, rain, and snow, and supplied with its own venting system.

[42 FR 27898, June 1, 1977]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §430.2, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.fdsys.gov.

EFFECTIVE DATE NOTE: At 75 FR 78848, Dec. 16, 2010, §430.2 was amended by revising the definitions for "electric refrigerator" and "electric refrigerator-freezer", effective Jan. 18, 2011. For the convenience of the user, the revised text is set forth as follows:

§ 430.2 Definitions.

* * * * *

Electric refrigerator means a cabinet designed for the refrigerated storage of food, designed to be capable of achieving storage temperatures above 32 °F (0 °C) and below 39 °F (3.9 °C), and having a source of refrigeration requiring single phase, alternating current electric energy input only. An electric refrigerator may include a compartment for the freezing and storage of food at temperatures below 32 °F (0 °C), but does not provide a separate low temperature compartment designed for the freezing and storage of food at temperatures below 8 °F (-13.3 °C).

Electric refrigerator-freezer means a cabinet which consists of two or more compartments with at least one of the compartments designed for the refrigerated storage of food and designed to be capable of achieving storage temperatures above 32 °F (0 °C) and below 39 °F (3.9 °C), and with at least one of the compartments designed for the freezing and storage of food at temperatures below 8 °F (-13.3 °C) which may be adjusted by the user to a temperature of 0 °F (-17.8 °C) or below. The source of refrigeration requires single phase, alternating current electric energy input only.

§ 430.3 Materials incorporated by reference.

(a) General. We incorporate by reference the following standards into

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Part 430. The material listed has been approved for incorporation by reference by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Any subsequent amendment to a standard by the standard-setting organization will not affect the DOE regulations unless and until amended by DOE. Material is incorporated as it exists on the date of the approval and a notice of any change in the material will be published in the FEDERAL REGISTER. All approved material is available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/ federal_register/

code of federal regulations/

ibr locations.html. Also, this material is available for inspection at U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Program, 6th Floor, 950 L'Enfant Plaza, SW., Washington, DC 20024, (202) 586-2945, or go to: http://www1.eere.energy.gov/buildings/appliance_standards/. Standards can be obtained from the sources below.

- (b) AHRI. Air-Conditioning, Heating, and Refrigeration Institute, 2111 Wilson Blvd, Suite 500, Arlington, VA 22201, 703-524-8800, or go to http://www.ahrinet.org.
- (1) ARI 210/240-2006, Unitary Air-Conditioning and Air-Source Heat Pump Equipment, approved March 26, 1998, IBR approved for Appendix M to Subpart B.
 - (2) [Reserved]
- (c) ANSI. American National Standards Institute, 25 W. 43rd Street, 4th Floor, New York, NY 10036, 212-642-4900, or go to http://www.ansi.org.
- (1) ANSI C78.3-1991 ("ANSI C78.3"), American National Standard for Fluorescent Lamps-Instant-start and Cold-Cathode Types-Dimensional and Electrical Characteristics, approved July 15, 1991; IBR approved for § 430.32.
- (2) ANSI C78.20–2003, Revision of ANSI C78.20–1995 ("ANSI C78.20"), American National Standard for electric lamps—A, G, PS, and Similar Shapes with E26 Medium Screw Bases, approved October 30, 2003; IBR approved for § 430.2.

- (3) ANSI C78.21–1989, American National Standard for Electric Lamps—PAR and R Shapes, approved March 3, 1989, IBR approved for §430.2.
- (4) ANSI C78.21–2003, Revision of ANSI C78.21–1995 with all supplements, American National Standard for Electric Lamps—PAR and R Shapes, approved October 30, 2003, IBR approved for § 430.2.
- (5) ANSI_IEC C78.81–2005, Revision of ANSI C78.81–2003 ("ANSI C78.81"), American National Standard for Electric Lamps—Double-Capped Fluorescent Lamps—Dimensional and Electrical Characteristics, approved August 11, 2005; IBR approved for §430.2, 430.32 and Appendix R of subpart B.
- (6) ANSI C78.375–1997, Revision of ANSI C78.375–1991 ("ANSI C78.375"), American National Standard for Fluorescent Lamps—Guide for Electrical Measurements, first edition, approved September 25, 1997; IBR approved for Appendix R to Subpart B.
- (7) ANSI_IEC C78.901-2005, Revision of ANSI C78.901-2001 ("ANSI C78.901"), American National Standard for Electric Lamps—Single-Based Fluorescent Lamps—Dimensional and Electrical Characteristics, approved March 23, 2005; IBR approved for §430.2 and Appendix R to Subpart B.
- (8) ANSI C79.1–1994, American National Standard for Nomenclature for Glass Bulbs—Intended for Use with Electric Lamps, approved March 24, 1994, IBR approved for §430.2.
- (9) ANSI C79.1–2002, American National Standard for Electric Lamps—Nomenclature for Glass Bulbs Intended for Use with Electric Lamps, approved September 16, 2002, IBR approved for § 430.2.
- (10) ANSI_ANSLG_ C81.61-2006, Revision of ANSI C81.61-2005, ("ANSI C81.61"), American National Standard for electrical lamp bases—Specifications for Bases (Caps) for Electric Lamps, approved August 25, 2006, IBR approved for §430.2.
- (11) ANSI C82.3–2002, Revision of ANSI C82.3–1983 (R 1995) ("ANSI C82.3"), American National Standard for Reference Ballasts for Fluorescent Lamps, approved September 4, 2002; IBR approved for Appendix R to Subpart B.

- (12) ANSI Standard C82.2–2002, Revision of ANSI C82.2–1994 (R1995), American National Standard for Lamp Ballasts—Method of Measurement of Fluorescent Lamp Ballasts, approved June 6, 2002, IBR approved for Appendix Q to Subpart B.
- (13) ANSI Z21.56–1994, Gas-Fired Pool Heaters, section 2.9, approved December 5, 1994, IBR approved for Appendix P to Subpart B.
- (d) ANSI Reseller. Global Engineering Documents, 15 Inverness Way, East Englewood, CO 80112, Phone: 800.854.7179 or 303.397.7956, http://www.global.ihs.com, Email: global@ihs.com. DOE does not endorse any particular reseller and notes that other resellers may also have the superseded standard for sale. Consult http://webstore.ansi.org/ for more information on additional resellers.
- (1) ANSI C82.2–1984, Revision of ANSI C82.2–1977, American National Standard for Fluorescent Lamp Ballasts—Method of Measurement, approved October 21, 1983, IBR approved for Appendix Q to Subpart B.
 - (2) [Reserved]
- (e) ASHRAE. American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., Publication Sales, 1791 Tullie Circle, NE., Atlanta, GA 30329, 800–527–4723 or 404–636–8400, or go to http://www.ashrae.org.
- (1) ASHRAE 23–2005, Methods of Testing for Rating Positive Displacement Refrigerant Compressors and Condensing Units, approved February 10, 2005, IBR approved for Appendix M to Subpart B.
- (2) ASHRAE 37–2005, Methods of Testing for Rating Unitary Air-Conditioning and Heat Pump Equipment, approved March 11, 2005, IBR approved for Appendix M to Subpart B.
- (3) ASHRAE 41.1–1986 (Reaffirmed 2001), Standard Method for Temperature Measurement, approved February 18, 1987, IBR approved for Appendix E and Appendix M to Subpart B.
- (4) ASHRAE 41.2–1987 (Reaffirmed 1992), Standard Methods for Laboratory Airflow Measurement, approved October 1, 1987, IBR approved for Appendix M to Subpart B.
- (5) ASHRAE 41.6–1994 (Reaffirmed 2001), Standard Method for Measurement of Moist Air Properties, approved

- August 30, 1994, IBR approved for Appendix M to Subpart B.
- (6) ASHRAE 41.9–2000, Calorimeter Test Methods for Mass Flow Measurements of Volatile Refrigerants, approved October 6, 2000, IBR approved for Appendix M to Subpart B.
- (7) ASHRAE/AMCA 51–1999/210–1999, Laboratory Methods of Testing Fans for Aerodynamic Performance Rating, approved December 2, 1999, IBR approved for Appendix M to Subpart B.
- (8) ASHRAE 103–1993, Methods of Testing for Annual Fuel Utilization Efficiency of Residential Central Furnaces and Boilers, (with Errata of October 24, 1996) except for sections 3.0, 7.2.2.5, 8.6.1.1, 9.1.2.2, 9.5.1.1, 9.5.1.2.1, 9.5.1.2.2, 9.5.2.1, 9.7.1, 10.0, 11.2.12, 11.3.12, 11.4.12, 11.5.12 and appendices B and C, approved October 4, 1993, IBR approved for §430.23 and Appendix N to Subpart B
- (9) ASHRAE 116–1995 (RA 2005), Methods of Testing for Rating Seasonal Efficiency of Unitary Air Conditioners and Heat Pumps, approved July 24, 1995, IBR approved for Appendix M to Subpart B.
- (f) ASME. American Society of Mechanical Engineers, Service Center, 22 Law Drive, P.O. Box 2900, Fairfield, NJ 07007, 973–882–1170, or go to http://www.asme.org.
- (1) ASME/ANSI A112.18.1M-1996, Plumbing Fixture Fittings, approved April 4, 1996, IBR approved for Appendix S to Subpart B.
- (2) ASME/ANSI A112.19.6-1995, Hydraulic Requirements for Water Closets and Urinals, approved April 6, 1995, IBR approved for §430.2 and Appendix T to Subpart B.
- (g) AHAM. Association of Home Appliance Manufacturers, 1111 19th Street, NW., Suite 402, Washington, DC 20036, 202–872–5955, or go to http://www.aham.org.
- (1) ANSI/AHAM DW-1-1992, American National Standard, Household Electric Dishwashers, approved February 6, 1992, IBR approved for Appendix C to Subpart B and §430.32.
 - (2) [Reserved]
- (h) CEC. California Energy Commission, 1516 Ninth Street, MS-25, Sacramento, CA 95814, 916-654-4091, or go to http://www.energy.ca.gov.

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- (1) CEC Test Method for Calculating the Energy Efficiency of Single-Voltage External Ac-Dc and Ac-Ac Power Supplies, August 11, 2004, IBR approved for Appendix Z to Subpart B.
 - (2) [Reserved]
- (i) CIE. Commission Internationale de l'Eclairage (CIE), Central Bureau, Kegelgasse 27, A–1030, Vienna, Austria, 011+43 1 714 31 87 0, or go to http://www.cie.co.at.
- (1) CIE 13.3–1995 ("CIE 13.3"), Technical Report: Method of Measuring and Specifying Colour Rendering Properties of Light Sources, 1995, ISBN 3 900 734 57 7; IBR approved for § 430.2 and Appendix R to Subpart B.
- (2) CIE 15:2004 ("CIE 15"), Technical Report: Colorimetry, 3rd edition, 2004, ISBN 978 3 901906 33 6; IBR approved for Appendix R to Subpart B.
- (j) Environmental Protection Agency (EPA), ENERGY STAR documents published by the Environmental Protection Agency are available online at http://www.energystar.gov or by contacting the Energy Star hotline at 1-888-782-7937.
- (1) ENERGY STAR Testing Facility Guidance Manual: Building a Testing Facility and Performing the Solid State Test Method for ENERGY STAR Qualified Ceiling Fans, Version 1.1, approved December 9, 2002, IBR approved for Appendix U to Subpart B.
- (2) ENERGY STAR Program Requirements for Residential Light Fixtures, Version 4.0, approved January 10, 2005, IBR approved for Appendix V to Subpart B.
- (3) ENERGY STAR Program Requirements for Dehumidifiers, approved January 1, 2001, IBR approved for Appendix X to Subpart B.
- (4) Energy Star Program Requirements for Single Voltage External AcDc and Ac-Ac Power Supplies, Eligibility Criteria (Version 2.0), effective date for EPS Manufacturers November 1, 2008, IBR approved for Subpart C, § 430.32.
- (5) Test Methodology for Determining the Energy Performance of Battery Charging Systems, approved December 2005, IBR approved for Appendix Y to Subpart B.
- (k) *IESNA*. Illuminating Engineering Society of North America, 120 Wall Street, Floor 17, New York, NY 10005–

- 4001, 212–248–5000, or go to http://www.iesna.org.
- (1) The IESNA Lighting Handbook, Reference & Application, ("The IESNA Lighting Handbook"), 9th ed., Chapter 6, "Light Sources," July 2000, IBR approved for §430.2.
- (2) IESNA LM-9-99, ("LM-9"), IESNA Approved Method for the Electrical and Photometric Measurements of Fluorescent Lamps, 1999. IBR approved for §430.2 and Appendix R to Subpart B.
- (3) IESNA LM-16-1993 ("IESNA LM-16"), IESNA Practical Guide to Colorimetry of Light Sources, December 1993, IBR approved for §430.2.
- (4) IES LM-20-1994, IESNA Approved Method for Photometric Testing of Reflector-Type Lamps, approved December 3, 1994, IBR approved for Appendix R to Subpart B.
- (5) IESNA LM-45-00, ("LM-45"), IESNA Approved Method for Electrical and Photometric Measurements of General Service Incandescent Filament Lamps, approved May 8, 2000; IBR approved for Appendix R to Subpart B.
- (6) IES LM-58-1994, IESNA Guide to Spectroradiometric Measurements, approved December 3, 1994, IBR approved for Appendix R to Subpart B.
- (1) *IEC*. International Electrotechnical Commission, available from the American National Standards Institute, 11 W. 42nd Street, New York, NY 10036, 212–642–4936 or go to http://www.iec.ch.
- (1) International Electrotechnical Commission (IEC) Standard 62301 ("IEC 62301"), Household electrical appliances—Measurement of standby power (first edition, June 2005), IBR approved for Appendix N to Subpart B.
 - (2) [Reserved]
- (m) NSF International. NSF International, P.O. Box 130140, 789 North Dixboro Road, Ann Arbor, MI 48113–0140, 1–800–673–6275, or go to http://www.nsf.org.
- (1) NSF/ANSI 51-2007 ("NSF/ANSI 51"), Food equipment materials, revised and adopted April 2007, IBR approved for § 430.2.
 - (2) [Reserved]
- (n) Optical Society of America. Optical Society of America, 2010 Massachusetts Ave., NW., Washington, DC 20036–1012, 202–223–8130, or go to http://www.opticsinfobase.org;

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- (1) "Computation of Correlated Color Temperature and Distribution Temperature," A.R. Robertson, Journal of the Optical Society of America, Volume 58, Number 11, November 1968, pages 1528–1535, IBR approved for § 430.2.
 - (2) [Reserved]
- (o) U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Resource Room of the Building Technologies Program, 950 L'Enfant Plaza, SW., 6th Floor, Washington, DC 20024, 202–586–2945, or go to http://www.energystar.gov.
- (1) ENERGY STAR Program Requirements for [Compact Fluorescent Lamps] CFLs, Version 3.0, approved October 30, 2003, IBR approved for Appendix V to Subpart B.
- (2) ENERGY STAR Program Requirements for [Compact Fluorescent Lamps] CFLs, approved August 9, 2001, IBR approved for Appendix W to Subpart B.

[74 FR 12066, Mar. 23, 2009, as amended at 74 FR 31840, July 6, 2009; 74 FR 34177, July 14, 2009; 74 FR 54455, Oct. 22, 2009; 75 FR 42583, July 22, 2010; 75 FR 64631, Oct. 20, 2010]

EFFECTIVE DATE NOTE: At 75 FR 78848, Dec. 16, 2010, §430.3 was amended by redesignating paragraph (g)(1) as (g)(2) and adding new paragraphs (g)(1) and (g)(3), effective Jan. 18, 2011. For the convenience of the user, the added text is set forth as follows:

$\S 430.3$ Materials incorporated by reference.

(g) * * *

(1) ANSI/AHAM HRF-1-1979, (Revision of ANSI B38.1-1970), ("HRF-1-1979"), American National Standard, Household Refrigerators, Combination Refrigerator-Freezers and Household Freezers, approved May 17, 1979, IBR approved for Appendices A1 and B1 to Subpart B.

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(3) AHAM Standard HRF-1-2008, ("HRF-1-2008"), Association of Home Appliance Manufacturers, Energy and Internal Volume of Refrigerating Appliances (2008), including Errata to Energy and Internal Volume of Refrigerating Appliances, Correction Sheet issued November 17, 2009, IBR approved for Appendices A and B to Subpart B.

§ 430.4 Sources for information and guidance.

(a) General. The standards listed in this paragraph are referred to in the DOE test procedures and elsewhere in this part but are not incorporated by reference. These sources are given here for information and guidance.

- (b) *IESNA*. Illuminating Engineering Society of North America, 120 Wall Street, Floor 17, New York, NY 10005–4001, 212–248–5000, or go to http://www.iesna.org.
- (1) Illuminating Engineering Society of North America Lighting Handbook, 8th Edition, 1993.
 - (2) [Reserved]
- (c) *IEEE*. Institute of Electrical and Electronics Engineers, Inc., 3 Park Avenue, 17th Floor, New York, NY, 10016–5997, 212–419–7900, or go to http://www.ieee.org.
- (1) IEEE 1515-2000, IEEE Recommended Practice for Electronic Power Subsystems: Parameter Definitions, Test Conditions, and Test Methods, March 30, 2000.
- (2) IEEE 100, Authoritative Dictionary of IEEE Standards Terms, 7th Edition, January 1, 2006.
- (d) *IEC*. International Electrotechnical Commission, available from the American National Standards Institute, 11 W. 42nd Street, New York, NY 10036, 212–642–4936, or go to http://www.iec.ch.
- (1) IEC 62301, Household electrical appliances—Measurement of standby power, First Edition, June 13, 2005.
- (2) IEC 60050, International Electrotechnical Vocabulary.
- (e) National Voluntary Laboratory Accreditation Program, Standards Services Division, NIST, 100 Bureau Drive, Stop 2140, Gaithersburg, MD 20899–2140, 301–975–4016, or go to http://ts.nist.gov/standards/accreditation.
- (1) National Voluntary Laboratory Accreditation Program Handbook 150– 01, Energy Efficient Lighting Products, Lamps and Luminaires, August 1993.
 - (2) [Reserved]

[74 FR 12066, Mar. 23, 2009]

Subpart B—Test Procedures

§430.21 Purpose and scope.

This subpart contains test procedures required to be prescribed by DOE pursuant to section 323 of the Act.